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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/537,367	03/29/2000	Takashi Sawano	49659(904)	6664
21874	7590	05/20/2005	EXAMINER	
EDWARDS & ANGELL, LLP			PARK, CHAN S	
P.O. BOX 55874			ART UNIT	
BOSTON, MA 02205			PAPER NUMBER	
			2622	

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/537,367

Applicant(s)

SAWANO, TAKASHI

Examiner

CHAN S. PARK

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-19 and 21-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14,15 and 35-39 is/are allowed.
- 6) ☒ Claim(s) 1,3-5,18,19,21-23 and 34 is/are rejected.
- 7) ☒ Claim(s) 6-13, 16, 17 and 24-33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received on 11/12/04, and has been entered and made of record. Currently, **claims 1, 3-19 and 21-39** are pending.

Response to Arguments

2. Applicant's arguments, see pages 15-17, filed 11/12/04, with respect to 35 U.S.C. § 112, second paragraph rejections have been fully considered and are persuasive. The rejections of claims 1, 14, 18, 19, 34-37 and 39 have been withdrawn.
3. The indicated allowability of **claims 1, 3-5, 18, 19, 21-23 and 34** is withdrawn in view of the newly discovered reference(s) to Kono Japanese Patent Publication No. 10044529 and Kanipakam et al. U.S. Patent No. 6,671,062 (hereinafter Kanipakam). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 18, 19, 21 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Kono.

4. With respect to claim 1, Kono discloses a printing system including a host device which creates print data in a page unit that comprises a plurality of pages or a single page and a printing device which prints out the print data transmitted from the host device,

said printing device further including memory means (memory 2) for storing pages of the print data at least partially,

wherein, when the print data exceed a memory capacity of the memory means, the print data are printed out and comprise first print data, which correspond to print data within the memory capacity of the memory means, and second print data, which correspond to print data exceeding the memory capacity of the memory means and which are transmitted from the host device; and

re-transmission requesting means which requests the host device to re-transmit the second print data to the printing device when the print data are to be printed out in multiple copies,

wherein printing of the print data of second and subsequent copies is carried out and comprises the first print data and the second print data, which are re-transmitted from the host device in response to the request of the re-transmission requesting means.

Please refer to the Translation of the reference filed on 3/29/00.

5. With respect to claim 3, Kono disclose the printing system as set forth in claim 1, wherein said memory means stores identification information for identifying the second print data, and

the re-transmission requesting means decides, based on the identification information, the second print data for which re-transmission should be requested to the host device.

The translation recites:

"Then, in step F because the print data to be used in copy printing are not held entirely in the reception data memory 2, the page re-transmission requesting circuit sends a request to the host computer to re-transmit the print data of pages to be used in copy printing so as to carry out copy printing while receiving from the host computer the print data of only those pages for which copy printing is to be made. In this way, re-transmission of print data from the host computer is made only when the print data of pages to be used copy printing cannot be maintained in the reception data memory 2, thus reducing burden put on the host computer."

Thus, the memory of the printing system inherently holds the information regarding which pages are not stored for the re-transmission.

6. With respect to claim 18, Kono discloses a printing system including:

memory means for storing in a page unit that comprises a plurality of pages or a single page of print data transmitted from a host device;

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output section for printing the print data stored in the memory means; and

control means for controlling the memory means and the output section, wherein the control means, upon detecting presence of print data of pages which exceed a memory capacity of the memory means, instructs the memory means to store identification information which is to be used to identify the print data of exceeding pages, and requests, based on the identification information, the host device to re-transmit the print data of exceeding pages corresponding to the identification information, and the control means combines in a page unit that comprises a plurality of pages or a single page the print data stored in the memory means and the print data of exceeding pages which were re-transmitted from the host device so as to print out the data from the output section.

Arguments analogous to those presented for claims 1 and 3, are applicable.

7. With respect to claim 19, Kono teaches a printing method in a printing system, comprising the steps of:

- a. storing pages of print data at least partially on memory means, which print data having been transmitted in a page unit that comprises a plurality of pages or a single page from a host device; and
- b. printing the print data, when the print data exceed a memory capacity of the memory means, that comprise first print data which correspond to print data within the a memory capacity of the memory means and second print data, which are transmitted from the host device and which correspond to print data

exceeding the memory capacity of the memory means, wherein said step (b) further includes the sub-steps of:

- i. requesting the host device to re-transmit the second print data when the print data are to be printed out in multiple copies; and
- ii. printing the print data of second and subsequent copies, which data comprise the first print data and the second print data which are re-transmitted from the host device.

Arguments analogous to those presented for claim 1, are applicable.

8. With respect to claim 21, arguments analogous to those presented for claim 3, are applicable.

9. With respect to claim 34, Kono teaches a printing method in a printing system, comprising the steps of:

(a) storing in a page unit that comprises a plurality of pages or a single page of print data transmitted from a host device;

(b) detecting presence of print data of pages exceeding a memory capacity of the memory means in said step (a);

(c) storing identification information for identifying the print data of exceeding pages;

(d) requesting, based on the identification information, the host device to re-transmit the print data of exceeding pages; and

(e) printing the print data in a page unit that includes the print data stored in said step (a) and the print data of exceeding pages which were re-transmitted from the host device in accordance with said step (d).

Arguments analogous to those presented for claims 1 and 3, are applicable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kono as applied to claim 1 above, and further in view of Kanipakam.

10. With respect to claims 4 and 5, Kono discloses a printing system as set forth in claim 1, but it does not disclose expressly that the memory means stores a leading side of the print data as the first print data or trailing side of the print data as the first print data.

Kanipakam, the same field of endeavor of the print data transmission art, discloses a host computer which can send the print data in a reverse order (col. 1, line 64 – col. 3, line 31).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to combine the method of transmitting the print data in a reverse order of Kanipakam with the memory management method of Kono.

The suggestion/motivation for doing so would have been to first send the print data in the user-specified order and then apply the memory management for those data when the memory becomes full.

Therefore, it would have been obvious to combine Kono with Kanipakam to obtain the invention as specified in claims 4 and 5.

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kono as applied to claim 19 above, and further in view of Kanipakam.

11. With respect to claims 22 and 23, arguments analogous to those presented for claims 4 and 5, are applicable.

Allowable Subject Matter

12. **Claims 14, 15 and 35-39** are allowed.

13. **Claims 6-13, 16, 17 and 24-33** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAN S. PARK whose telephone number is (571) 272-7409. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

csp
May 4, 2005

Chan S. Park
Examiner
Art Unit 2622


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SUPERVISOR, PATENT EXAMINER
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